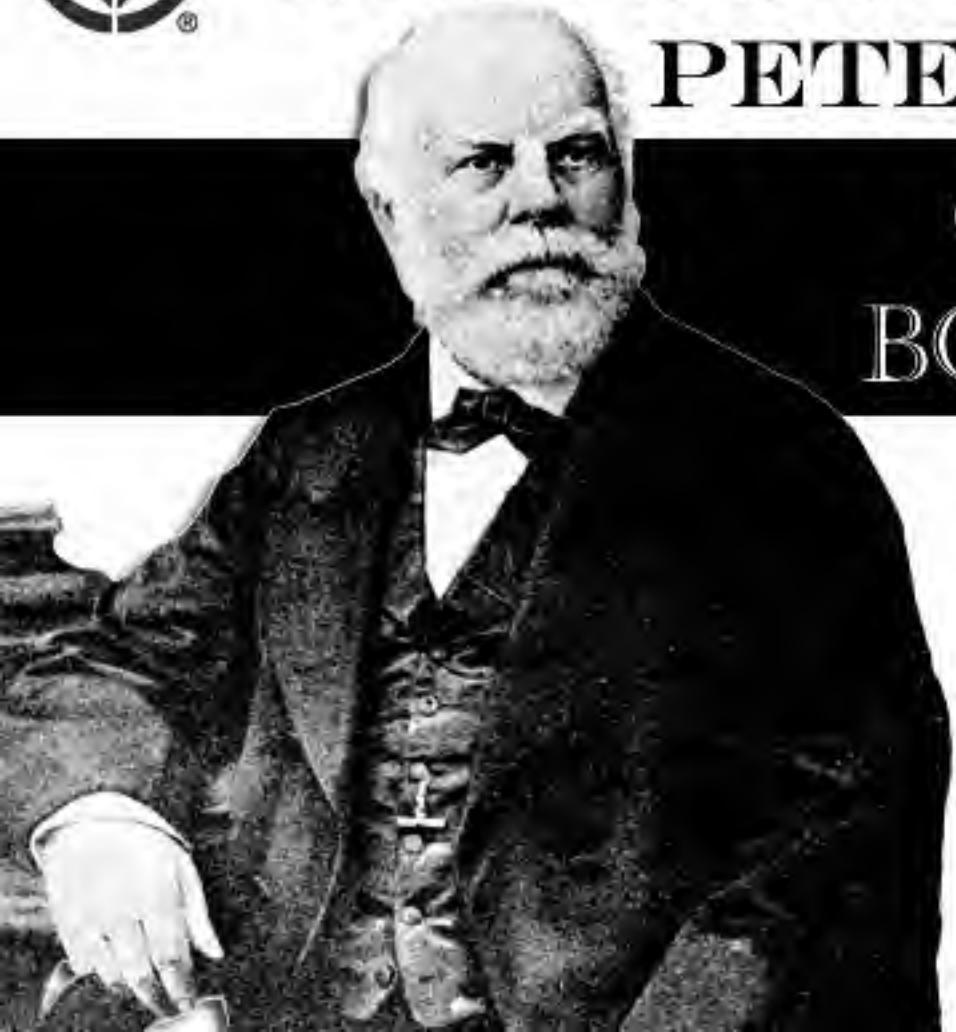




MISSOURI BOTANICAL GARDEN

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GEORGE ENGELMANN BOTANICAL NOTEBOOKS

Pagination Note:
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Philip Frost, Gardner et
Dropmore
1822-1872 a father

Literature
&
Extracts

1826-1882

Literature



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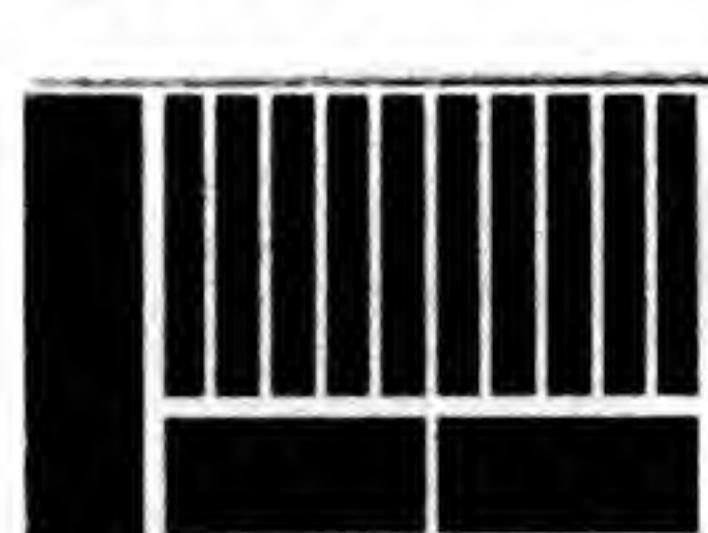
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MISSOURI
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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



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Recd March 26 1891

Chas. W. Schulte 1891-16
with 7-10

Cambridge, Mar. 23

Dear Dr. Engelm., The locations
corresponding to the dates mentioned
by you are as follows —

July 13-15. Southern part of the Rocky
Mountains, where they are crossed by the
Utah & Northern narrow gauge Railroad

July 26. On the trail crossing the main ridge
of the Rocky Mts. between ^{from} Big Hole Valley and
Bitterroot Valley in western Montana. I saw
no Pinus ponderosa until I crossed this divide,
and then it came in at once in abundance.

August 5th. Mountains north of Missoula,
Montana. In the mountains east of
Missoula I first found the Larix.

August 20-25. On the Idaho trail over the
mountains separating Montana from Ida-
ho — southwest from Missoula an 5
coming down on to the Clearwater.



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Sept. 3, 5, 9, 21, 22. Crossing the same mountains farther north by the "Mud-Lan road", between Fort Coeur d'Alene and Missoula, + back again

Oct. 6th. On the British Boundary between the Columbia River and the Okanagan. Part

Oct. 16, 17. Cascade Mts., crossing over from the Wenatchee river ^{25 miles above its mouth} to the Yakima

Oct. 18, 21. Cascade Mts., on the upper Yakima.

I have no doubt that those pines are all *P. amabilis* ^{albicolor} - a small tree, at an altitude of 6-8,000 feet, which I could tell from *P. contorta* only by counting the leaves + by the latter's usually retaining its cones. I saw no *P. flexilis*.

I thought you would find some *Aris* *concolor*. There were specimens from an unusually white-leaved tree, but there were no cones to be found.

The *Psuedotsuga* varies exceedingly, as you doubtless know. The only way in



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(especially the young trees)
which I could distinguish it positively
from an *Abies* (and from the cones)
was by the gray brown acutely conical
terminal buds.

Dr. Gray's last letter was from
Paris — he must be now in Italy.
All well.

Yours very truly
Anna Watson

AA



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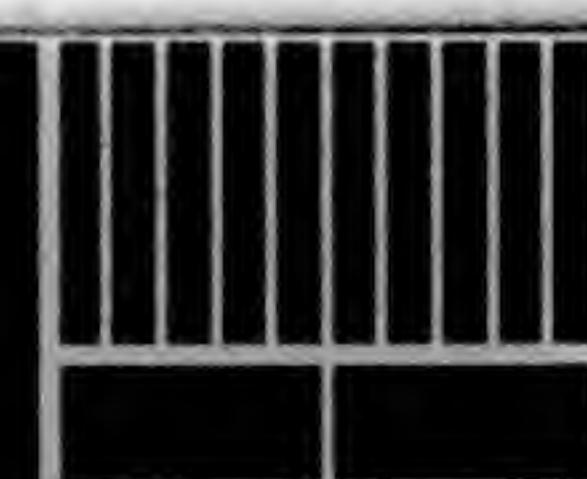
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Coniferae — Literatur

Lawson, *Pinetum Britanicum* (written by A. Murray) of

A. Murray, the Pines and Firs of Japan, London 1863.

(A.Br)

Synopsis der Nadelhölzer etc. von Kenkel & Hochstetter Stuttgart 1865 (A.Br)

Die Verbreitung der Coniferen in der jzg. Zeit und in fr. geol. Erscheinungen von (A.Br)

Dr. F. Hildebrand, in Verh. d. nat. V. f. Rhein & Westf. XVIII. Jahrg. Adam 1861

Taxodium 5-6 Cotyl.

Cupressus 2, 2½-3 Cotyl.



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Bedf.

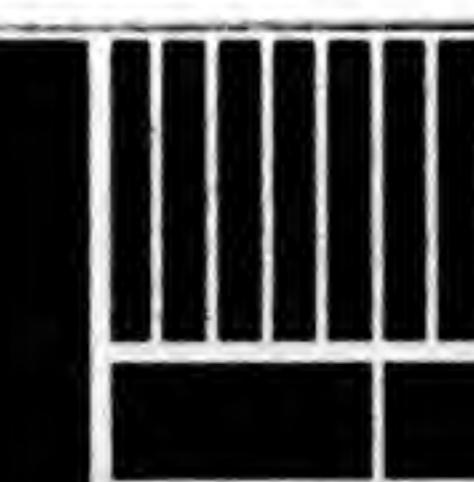
Pinetum Woburnense 1809

Duke of Bedford?

quoted by Regel

Others say: Forbes, *Brit. Wob.*

Prized has: James Forbes, *Pinetum Woburnense*
collat of Duke of Bedford Lond 1839
"quis autor sit, ambiguitur"
see Regel p. 87



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Athens, Menard Co. Ill.

May 13th 1872

Dr. Geo. Engelmann—

Dear Sir:-

Your favor of May 8th has
been received, enclosing Bank check for \$54⁴⁰/₁₀₀, in my
favor, on account of Oregon plants from Dr. Gray for



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Trans. Lin. Soc. Lond. vol XVII. 1837

p. 439 Descrip on 5 new Conifer known by Dr. Coulter.

Coulter was 10 years in Amer., 7 in Mexico and 3 in California

p. 440 *P. Coulteri*. Santa Lucia Mts. 80-100 feet alt.441. *P. muricata* (fol. 3 ?) strobilis inaequilateri - ovatis aggregatis squamis canesci apice distatis umbilicis elevata mucronatis; bases externe elongatis anapili - compressis recurrato - pectatis.

Sierra Orosi alt 3000'

Alt. 40' alt. strob. inaequilateri 3 - pollic.

Cones much the smallest of the section, not larger than those of inops, remarkable for the consider development - - Cones not seen - probably 3.

p. 442 *P. radula* (foliis 3 ?) strobilis inaequilateri - ovatis: squamis radicis - rimosis umbilicis depresso truncatis, bases externe triplo majoribus gibbosis subbrownis [now considered = *insignis*]

Si maris littore ad Monterey.

wide

100' alt. strobili 6-pollinaires aggregatis, basi exterior ventricosa.

sq. spedie outside - - almost close to the beach - excellent timber much used for building boats

p. 442 *P. tuberculata* (fol 3 ?) strobilis inaequilateri - oblongis aggregatis squamis apice quadrangularis umbilicis depresso truncatis, bases externe majoribus elevatis conicis. See same in Coulter p 16,

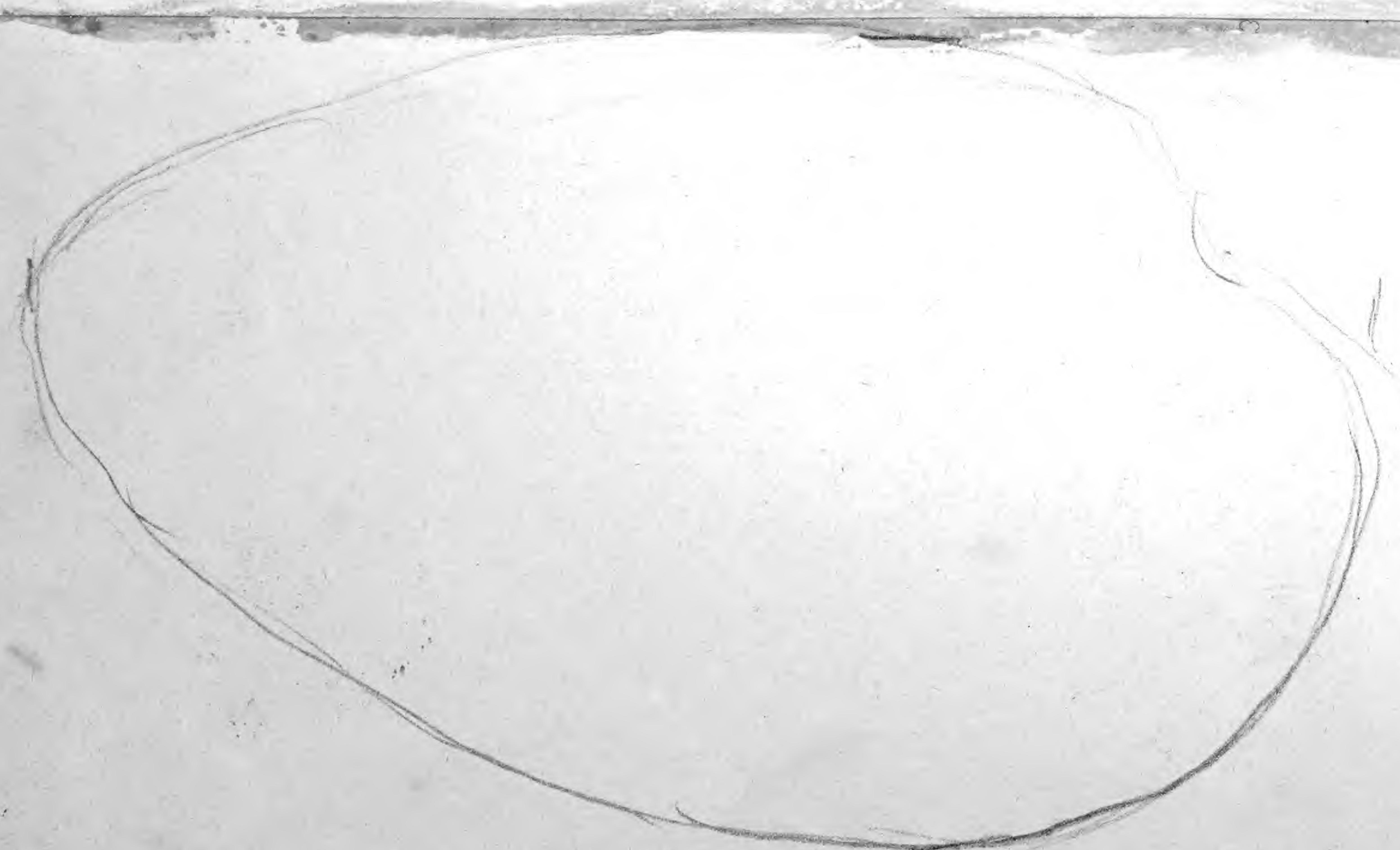
Si maris littore ad Monterey.

100' alt. strobili folios - oblongi 4-pollinaires 2 1/2' trans.

p. 422. *P. Bracteata* ... foliis rotundatis, strobilis ovatis bracteatis trichobus leucina intermixta longiora nonnata

- Si Mont. St. Lucia alt 3000' pd.

only the middle branches bear cones.



This would be the shape of cone of tuberculata according to Don's description and measurement, and would refer to *insignis* rather than to our present tuberculata.

Don in Trans Lin Soc.

XVII. 1837

Sabat's figure gives a slender one 4 1/2" long
2" wide

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MISSOURI BOTANICAL GARDEN
GEORGE ENGELMANN PAPERS



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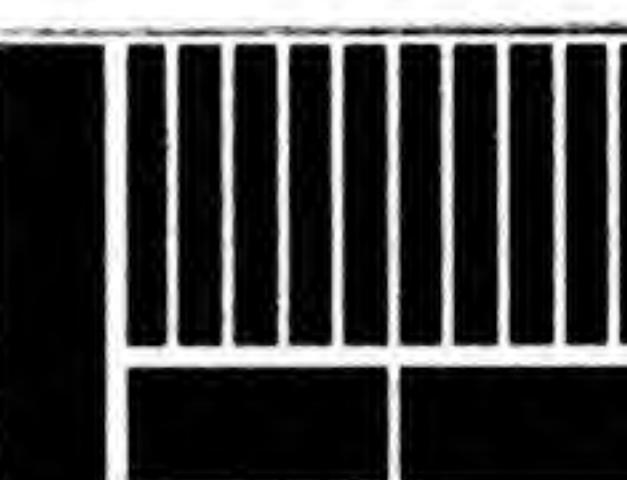
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London Abortion & Fructification Standard 8 vol
London 1838 2nd edit. 1844
London Encyclopedia London 1842 (at Shaw's)
Cuddeback Calif. 1847.
Lambert P. vol II 1837 vol I 1828
British Woburnensis 1839 vol II
Lawson's Manual " quoted for some species by London can not be
L. 'Agriculturist' Manual, 1836 - but this is the only, quoted by
Prifel

Templin - Linnz 2



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Seeman 1961 is it pitch s. cedarwood?

Look 12 or 13 a big leaf ~~contorta~~?

~~temiphi~~ - leaves 22-25 out

Quite similar Harbor 620



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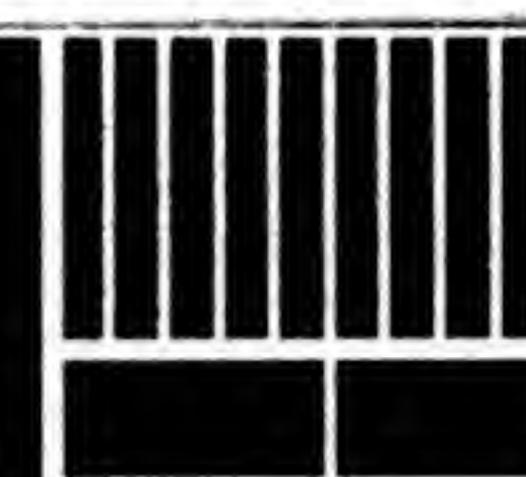
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1838
P. insignis Dougl. Miss. ex Loud. Arbor. 4. p. 2243

P. ponderosa Dougl. - Loud. Arb. p. 2243

P. monilifera Loud. Am. Reg. 1860. pp. 1-61

P
Pinus californica Loisel. = New. Edinburgh 1808-1819
vol V 243 = insignis



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cm

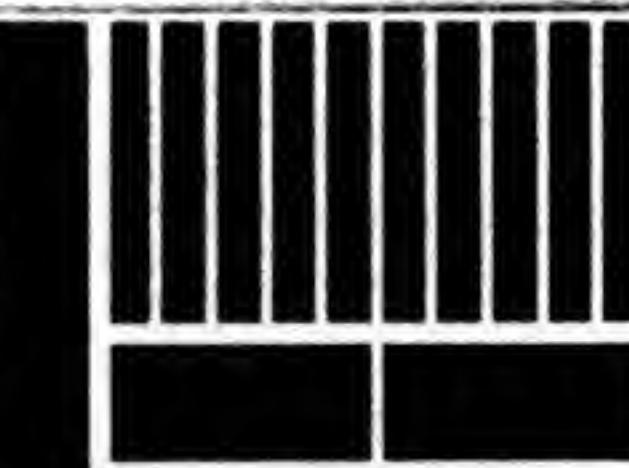
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1839 Princeton Robinsense 1839

Kew Sept 1869

Forbes to the author 1

(Torrey is the author)

tab 2. *P. Mughus* is the form of *P. uncinata*
 3 *P. Banksiana* " our plant; cones lateral
 curved upward.
 4 *P. engelmanni* 2 cones placed wrong, stipitate
 5 *parryi* 3 cones placed wrong, stipitate
 8 *halepepsis* cone with lateral cone
 9 *Boutinii*, immense cluster of cones - same
 15 *pondicosa* a the same old attenuated cone
 attenuated (at base) represented
 16 ~~so that he~~ so often placed wrong, apical
 16 *serotina* cones placed wrongly apical
 18 *insignis*
 23. 24 *Sebifera* good
 25 26 *Coulteri* " "
 28 *Ciliophylla* "
 30 *Lambertiana* "
 31 *Montezumae* "
 32 *Menziesii* "
 33 *Abies alba*
 34 ~~Abies~~ *nigra*
 35 ~~Abies~~ *nigra*, the large →
 cones *nigra*, cones terminal
 on branchlets, apparently
 intermediate between *nigra*
 and *alba*
 38 *Tremuloides*
Balsamea
hololeuca
amabilis
gracilis
robusta





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I. fr. ann.

Aug 11. 1863

5. anther transvers.

1. Poll. simpl.

1. Salix oval ^{0.045-55} Cyl. 4-6

2. Fraga

a. Peuced oval ^{0.060-70} Cyl. 6-7

b. Microperma petalloform ^{0.036-40} Cyl. 3-4

2. Poll. terminal

3. abies Poll. 0.050-62 ^{septentrionalis} Cyl. 4-7

sp. anthers longitudinal

~~group 3 + 4 no cover~~

~~no cover~~

4. Picea Poll. 0.062-62 Cyl. 5-9

5. Cedrus Poll. 0.042 Cyl. 10

II. fructif. bim

6. Pinus Poll. 0.020-45 ^(& maritime 50) Cyl. 3-18

a. pubescens latifolia

~~P. nigra. P. sylvestris. Pinus~~
~~P. Banksiana~~

b. pinaster subsp. 3

~~Strob. planimargo spec.~~

~~Cambra cum nuciferis~~

~~Pinus (Pinus laricio Forreysiana)~~

~~Pinaster~~



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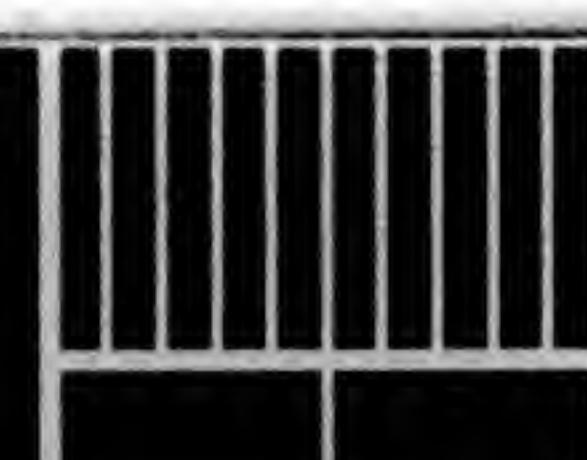
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Febr 1872

Date of first description of American Abietinae

1753. *Pinus Taeda* Lin Sp. Pl. ed. 1

" *P. strobus* Lin "

" *P. balsamea* Lin "

1762 *P. Canadensis* Lin Sp. Pl. ed. 1

1771 ? *P. palustris* Mill Dict. N. 14 (Ait H. Kaw)

1771 *P. rigida* Mill Dict. N. 10

1771 *P. mariana* D'Orb. des Bot.

1787 *P. americana* non Wangenb. Des. t. 75 t. 16

1788 *P. occidentalis* Swartz Prod. 103

1788 *P. glabra* Walt.

1789. *P. alba* Ait Hort Kaw ed 1

" *P. nigra* Ait "

" *P. rigida* Ait "

" *P. resinosa* Ait "

" *P. pendula* Ait "

" *P. Taeda* var *variabilis* Ait

1791 *P. americana* Gaertn fruct. t. 4. 91 (5064) = *nigra*

" *P. mariana* Gaertn a 3 Cylt = *canadensis*

1803 *P. Taxifolia* Lamb Pl. ed 1 vol 1. = *Douglasii*

" *P. nobilis* Lamb "

" *P. microcarpa* Lamb "

" *P. variabilis* Lamb = *P. rigida*.

P. Banksiana Lamb.

1803 *P. prunifera* Michx Fl.

" *P. mitis* Michx "

" *P. serotina* Michx "

Larix americana Michx "

1804 *P. hudsonica* Poir Lam Dict. V.

1810 *P. australis* Michx Arb.

" *P. murrayana* Michx "

" *P. rubra* Michx "

1813 *P. Californica* Louis. in Nouv. Arch. V

1816 *P. Fraseri* Park *P. variabilis* Park non Lamb

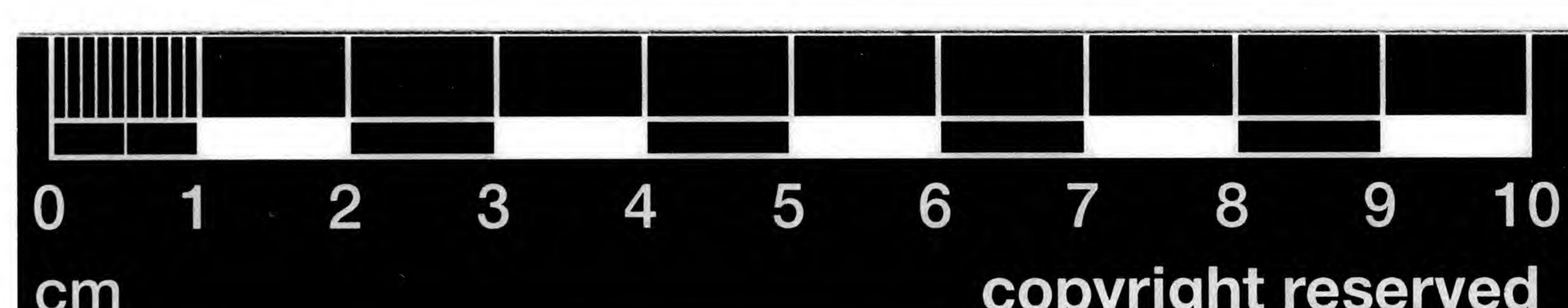
1817. *P. occidentalis* Hook. n. sp. sp. vol II.

1814 *Larix* & *Cedrus*

Fruct. & Corolla,

" *P. nigra* Hook. ib.

" *P. hirtella* Hook. ib.



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1823 P. flexilis James in Eng. Lep. 2 p. 27 or
 1828 P. Lambertiana Dougl. Lin. Transact XV.
 1830 P. Leocote Cham & Schl. Linnaea V.
 1831 P. patula Schiede & Deppe " VI
 1831 P. leiophylla " " " 1832 P. Miquelianum ¹⁸³¹ ¹⁸³² ¹⁸³³ ¹⁸³⁴ ¹⁸³⁵ ¹⁸³⁶ ¹⁸³⁷ ¹⁸³⁸ ¹⁸³⁹ ¹⁸⁴⁰ ¹⁸⁴¹ ¹⁸⁴² ¹⁸⁴³ ¹⁸⁴⁴ ¹⁸⁴⁵ ¹⁸⁴⁶ ¹⁸⁴⁷ ¹⁸⁴⁸ ¹⁸⁴⁹ ¹⁸⁵⁰ ¹⁸⁵¹ ¹⁸⁵² ¹⁸⁵³ ¹⁸⁵⁴ ¹⁸⁵⁵ ¹⁸⁵⁶ ¹⁸⁵⁷ ¹⁸⁵⁸ ¹⁸⁵⁹ ¹⁸⁶⁰ ¹⁸⁶¹ ¹⁸⁶² ¹⁸⁶³ ¹⁸⁶⁴ ¹⁸⁶⁵ ¹⁸⁶⁶ ¹⁸⁶⁷ ¹⁸⁶⁸ ¹⁸⁶⁹ ¹⁸⁷⁰ ¹⁸⁷¹ ¹⁸⁷² ¹⁸⁷³ ¹⁸⁷⁴ ¹⁸⁷⁵ ¹⁸⁷⁶ ¹⁸⁷⁷ ¹⁸⁷⁸ ¹⁸⁷⁹ ¹⁸⁸⁰ ¹⁸⁸¹ ¹⁸⁸² ¹⁸⁸³ ¹⁸⁸⁴ ¹⁸⁸⁵ ¹⁸⁸⁶ ¹⁸⁸⁷ ¹⁸⁸⁸ ¹⁸⁸⁹ ¹⁸⁹⁰ ¹⁸⁹¹ ¹⁸⁹² ¹⁸⁹³ ¹⁸⁹⁴ ¹⁸⁹⁵ ¹⁸⁹⁶ ¹⁸⁹⁷ ¹⁸⁹⁸ ¹⁸⁹⁹ ¹⁹⁰⁰ ¹⁹⁰¹ ¹⁹⁰² ¹⁹⁰³ ¹⁹⁰⁴ ¹⁹⁰⁵ ¹⁹⁰⁶ ¹⁹⁰⁷ ¹⁹⁰⁸ ¹⁹⁰⁹ ¹⁹¹⁰ ¹⁹¹¹ ¹⁹¹² ¹⁹¹³ ¹⁹¹⁴ ¹⁹¹⁵ ¹⁹¹⁶ ¹⁹¹⁷ ¹⁹¹⁸ ¹⁹¹⁹ ¹⁹²⁰ ¹⁹²¹ ¹⁹²² ¹⁹²³ ¹⁹²⁴ ¹⁹²⁵ ¹⁹²⁶ ¹⁹²⁷ ¹⁹²⁸ ¹⁹²⁹ ¹⁹³⁰ ¹⁹³¹ ¹⁹³² ¹⁹³³ ¹⁹³⁴ ¹⁹³⁵ ¹⁹³⁶ ¹⁹³⁷ ¹⁹³⁸ ¹⁹³⁹ ¹⁹⁴⁰ ¹⁹⁴¹ ¹⁹⁴² ¹⁹⁴³ ¹⁹⁴⁴ ¹⁹⁴⁵ ¹⁹⁴⁶ ¹⁹⁴⁷ ¹⁹⁴⁸ ¹⁹⁴⁹ ¹⁹⁵⁰ ¹⁹⁵¹ ¹⁹⁵² ¹⁹⁵³ ¹⁹⁵⁴ ¹⁹⁵⁵ ¹⁹⁵⁶ ¹⁹⁵⁷ ¹⁹⁵⁸ ¹⁹⁵⁹ ¹⁹⁶⁰ ¹⁹⁶¹ ¹⁹⁶² ¹⁹⁶³ ¹⁹⁶⁴ ¹⁹⁶⁵ ¹⁹⁶⁶ ¹⁹⁶⁷ ¹⁹⁶⁸ ¹⁹⁶⁹ ¹⁹⁷⁰ ¹⁹⁷¹ ¹⁹⁷² ¹⁹⁷³ ¹⁹⁷⁴ ¹⁹⁷⁵ ¹⁹⁷⁶ ¹⁹⁷⁷ ¹⁹⁷⁸ ¹⁹⁷⁹ ¹⁹⁸⁰ ¹⁹⁸¹ ¹⁹⁸² ¹⁹⁸³ ¹⁹⁸⁴ ¹⁹⁸⁵ ¹⁹⁸⁶ ¹⁹⁸⁷ ¹⁹⁸⁸ ¹⁹⁸⁹ ¹⁹⁹⁰ ¹⁹⁹¹ ¹⁹⁹² ¹⁹⁹³ ¹⁹⁹⁴ ¹⁹⁹⁵ ¹⁹⁹⁶ ¹⁹⁹⁷ ¹⁹⁹⁸ ¹⁹⁹⁹ ²⁰⁰⁰ ²⁰⁰¹ ²⁰⁰² ²⁰⁰³ ²⁰⁰⁴ ²⁰⁰⁵ ²⁰⁰⁶ ²⁰⁰⁷ ²⁰⁰⁸ ²⁰⁰⁹ ²⁰¹⁰ ²⁰¹¹ ²⁰¹² ²⁰¹³ ²⁰¹⁴ ²⁰¹⁵ ²⁰¹⁶ ²⁰¹⁷ ²⁰¹⁸ ²⁰¹⁹ ²⁰²⁰ ²⁰²¹ ²⁰²² ²⁰²³ ²⁰²⁴ ²⁰²⁵ ²⁰²⁶ ²⁰²⁷ ²⁰²⁸ ²⁰²⁹ ²⁰³⁰ ²⁰³¹ ²⁰³² ²⁰³³ ²⁰³⁴ ²⁰³⁵ ²⁰³⁶ ²⁰³⁷ ²⁰³⁸ ²⁰³⁹ ²⁰⁴⁰ ²⁰⁴¹ ²⁰⁴² ²⁰⁴³ ²⁰⁴⁴ ²⁰⁴⁵ ²⁰⁴⁶ ²⁰⁴⁷ ²⁰⁴⁸ ²⁰⁴⁹ ²⁰⁵⁰ ²⁰⁵¹ ²⁰⁵² ²⁰⁵³ ²⁰⁵⁴ ²⁰⁵⁵ ²⁰⁵⁶ ²⁰⁵⁷ ²⁰⁵⁸ ²⁰⁵⁹ ²⁰⁶⁰ ²⁰⁶¹ ²⁰⁶² ²⁰⁶³ ²⁰⁶⁴ ²⁰⁶⁵ ²⁰⁶⁶ ²⁰⁶⁷ ²⁰⁶⁸ ²⁰⁶⁹ ²⁰⁷⁰ ²⁰⁷¹ ²⁰⁷² ²⁰⁷³ ²⁰⁷⁴ ²⁰⁷⁵ ²⁰⁷⁶ ²⁰⁷⁷ ²⁰⁷⁸ ²⁰⁷⁹ ²⁰⁸⁰ ²⁰⁸¹ ²⁰⁸² ²⁰⁸³ ²⁰⁸⁴ ²⁰⁸⁵ ²⁰⁸⁶ ²⁰⁸⁷ ²⁰⁸⁸ ²⁰⁸⁹ ²⁰⁹⁰ ²⁰⁹¹ ²⁰⁹² ²⁰⁹³ ²⁰⁹⁴ ²⁰⁹⁵ ²⁰⁹⁶ ²⁰⁹⁷ ²⁰⁹⁸ ²⁰⁹⁹ ²⁰¹⁰⁰



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1841 *P. Sinclairii* Hook & Arn. Bot Society
 1842 *P. tenuifolia* Benth H. Hartw
 " *P. contorta* Dougl. in Loudon Logol. of Trees
 1845 *P. monophylla* Torr & Gray
 1846 *P. California* Hartw. ^{from Hartw. Soc. II. p. 189} Calif. for the present Potentilla
 1847 *P. tremontiana* East Lyn ¹⁸⁹ Hartw. Soc. II. p. 189
 " *P. tremuloides* Carr "
 " *P. radis* Carr "
 1848 *P. edulis* Engelm. Gilib. Rep.
 " *P. brachystem* Eng. " " = *P. ponderosa*
 " *P. chilensis* Eng. " "
 " *P. strobiiformis* Eng. " " = *P. Agassizii*
 " *P. osteosperma* Eng. " " = *P. cembroides*
 " *P. macrophylla* Eng. " "
 1849 *P. Montezumae* P. Cabensis Nutt Syl.
 " *larch occidentalis* Nutt Syl.
 " *P. tuberosa* Gordon in Journ. Hort. Soc. 4. 218 (Hartw's p. 189)
 1853. *P. Jeffreyi* Gray. Com. Murray Balfour ^{all these were placed}
 " *P. Murrayana* " " Balfour ^{in a loose sheet}
 " *P. tuberosa* " " Balfour ^{and only retained}
 " *P. Murrayana* " " (Jeffrey) ^{value is}
 " *P. Balfouriana* " " (Jeffrey) ^{Balfour}
 1855. *P. Hookeriana* Murray in Edib. nov. philos. Journ. p. 289
 " *P. Engelmieri* Carrière Conf. p. 356 *P. Beardsleyi* Muell. ibid = *P. ponderosa*
 1857. *P. Williamsonii* Newberry *P. Mcintoshii* ibid
 " *P. cembroides* Newberry
 1858. *P. Engelmieri* Sousa in Bot. Atch. p. 141. = *P. ponderosa*
 " *P. Mexicanus* Rozl's Mexican Pines
 " *P. Lindleyana* Loudon in Gord. Botetum. (name only in Cat. Cogn. ^{in Journ. Hort. Soc. V. 1850})
 " *P. Parryana* Gord. in Pict. p. 189 = *P. ponderosa*
 " *P. engelmanni* Lindley Journ. Hort. p. 155 *Picea Gordonii* P. Gordon 1817
 " *P. Balfouriana* Jeffrey and the others, see 1853. ^{referred}
 " *P. Pinneana* Gordon Pict. ^{in Gord. Pict.}
 1859. *P. Torreyana* Perry in Bot. Record
 " *P. deflecta* Torrey = *P. ponderosa*
 " *P. Engelmieri* Torrey = *P. ponderosa*
 " *P. Llaveana* Torrey = *P. Parryana* Eng.



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based on Dufresne, pl. 1
- ambig. Bladder

1860 *A. campylocarpa* Marr in Transact. Acad. Nat. Sc. U. S. p. 370

1863 *P. cophosperma* Lindl in Jard. Chronac p. 46 & Torreyana

1862 *P. Parryana* Engelm in Silliman Journ.

" *P. Cubensis* Griseb in Pl. Afr. II

" ~~Abies magnifica~~ Engelm in North. Am. Proc. ¹⁸⁶³

" ~~Abies concolor~~ Engelm in Govt. Publ. suppl. p. 52

1863. *P. aristata* Engelm in Louis. Transact. vol 2

P. albicaulis Engelm

Abies Engelmanni Perry

1868 *P. magnifica* Murray in Royal Socy (2d 1863) vol III p. 318

P. Greggii Engelm in DC. Prod. XVI. 2 (1868) p. 396

P. Bolaanderi Parlatore p. 379

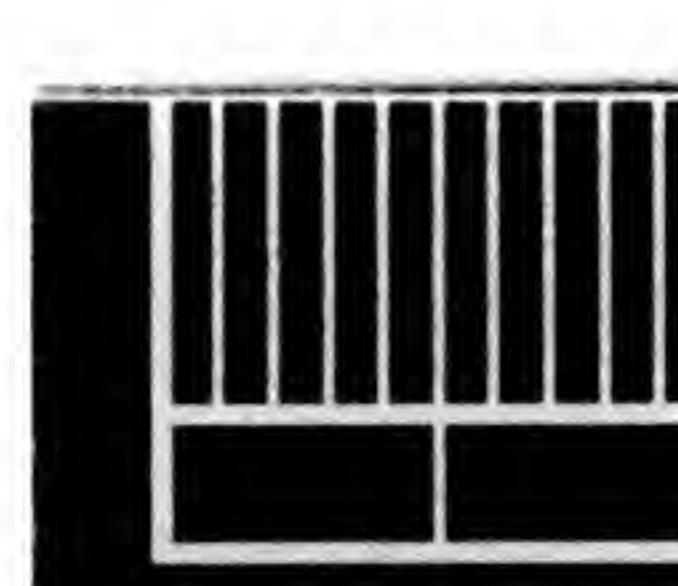
P. (Linx) Lyallii Parl p. 412

P. (Linx) Nuttallii Parl p. 412

P. conumata Parl p. 417

1876 *Abies nobilis* Engelm in Amer. Naturalist 1876 p. 554 Sept.

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Parry's Conifer
86h Picea
6 comosa
8 canadensis
9 Montezumae
10 lutea ~~var. monilifera~~
4 Abies concolor
4 Pyramidalis
5 Picea taeda
2 lutea ~~var. varia~~
3 flavescens
55 Ephedra sinensis ^{sp.}
~~sp.~~

47. ?
54. ?



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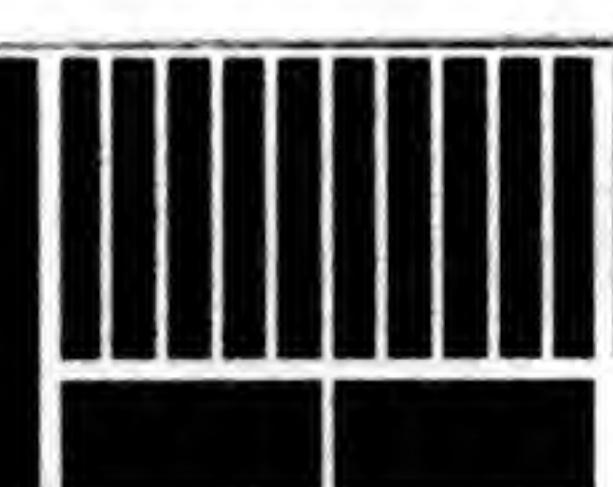
Julie Braun cogit
May 2076

Bertrand

Thèse préparée à la faculté
des Sciences de Paris
pour obtenir le grade de docteur
es Sciences naturelles

1^{er} Tome : anatomie comparée
des tiges et des feuilles
des Géphacées et des
Conifères

Paris 1874



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Les glandes
résinifères
sont accolées
à l'épiderme
inférieur

Des stomates
sur la face
supérieure. { Toute la face sup. est couverte de stomates, 14 files par bandelette *A. grandis*
Stomates { localisés en plusieurs files longues 10 files de stom. p. band. Et 2 régions
au nombre de 2 ou 3 près de la pointe de la feuille. Telle que
4 files de stomates par bandelette *A. numidica*

Pas de stomates
sur la face supé-
rieure. { 4 files de stomates
pas bandelette. { De l'hypoderme { zone continue d'hypoderme ... *A. cephalonica*
sous l'épiderme { zone discontinue { Beaucoup d'hyp. att.
supérieur. { d'hypoderme. { épiderme. *A. pedinata*
Pas d'hypoderme sous l'épiderme { très peu d'hyp. *A. pindrow*
Des fibres pseudoliberiennes *A. cilicica*
Pas de fibres { zone continue { Feuille macrancée ... *A. bifida*
pseudoliberiennes { d'hypoderme. { Feuille hilobée ... *A. bracteata*
riennes { zone discontinue d'hypoderme ... *A. spectabilis*
..... *A. gordoniaca*

Les glandes ré-
sinifères ne
touchent pas
l'épiderme in-
férieur.

Des stomates
sur la face
supérieure. { De l'hypoderme { 6 files de stomates sur la face sup. *A. Jussiae*
Pas de l'hypoderme. *A. Fraseri*
..... *A. balsamea*

Pas de stomates
sur la face su-
périeure. { Pas d'hypoderme ... { 10 files de stomates pas bandelette ... *A. Veitchii*
De l'hypoderme ... { 5 files de stomates pas bandelette ... *A. sibirica*

..... *A. homolepis*
..... *A. fiorii*

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Abies Nordmanniana austroamericana

imbricatae in a. pectinatae

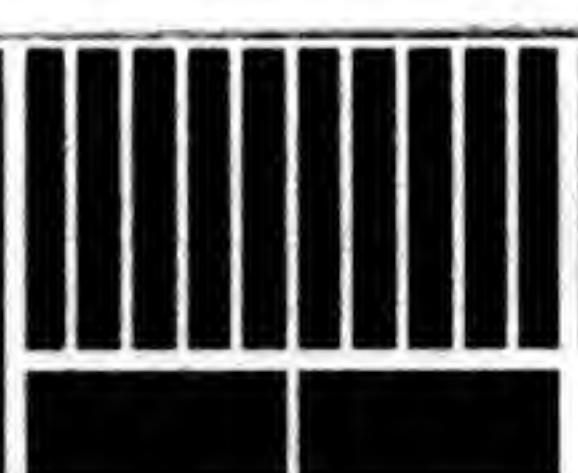
Abies webbiana sint über mit

A. Pindroa

A. religiosa sint & Coacheale

A. amabilis Forbes imbricatae austroamericanae
mit & A. Fraseri

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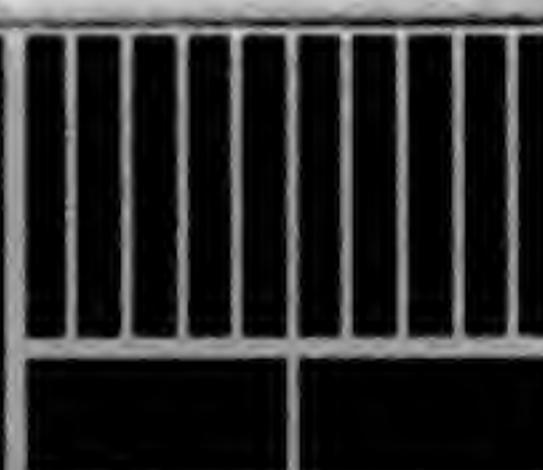
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Dr. C. Beinling, Über die geograph.
Verbreitung der Coniferen
Breslau 1858 4^{to}

Julius Schroeder, Das Holz der Coniferen
Dresden 1872 8^{to}



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George), ~~Engelmann~~ ~~insects of the~~
~~united states~~ '81, these are my
first for
1881 '81, may
no '80
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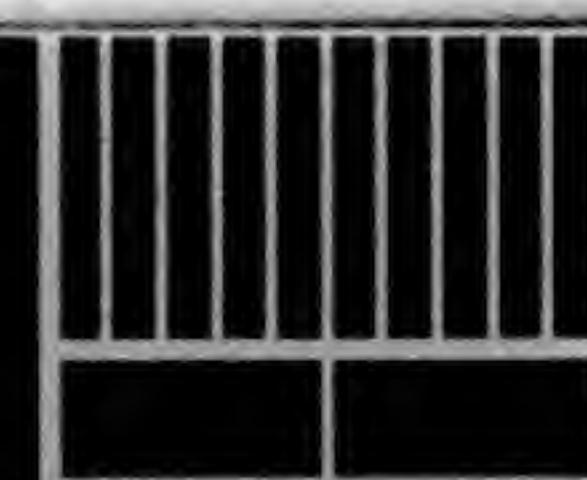
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? 1 *P. Oryzae* Jord. - Joam Herb Soc. I.
 2 ~~1800~~ *P. Zeocote* Chav & Sch. Linnae V
 1774 *P. rigid* Willd. Des. no 10. Denis Herb. 1771,2
Wright Brit. 1787
Marshallab 1785
 1800 *P. austalis* Michx Arb. 1810
 1803 *P. pumila* Michx H.
 1804 *P. australis* Michx H.
 1805 *P. varibilia* Banks ed 1 vol 1
 1789 *P. Zeocote* var *varibilia* Ait. & Kew
 1803 *P. Brachysperma* Lamk ed 1. vol 1
 1804 *P. Hudsonia* Lamk Desch V *P. Hudsonia* Poir
 1810 *P. impetiginosa* Michx Arb. ^{ex DC Arb}
 1810 *P. rubra* Michx Arb. ^{"old name"}
 1812 *P. cembroides* Juss. - Flon & - Flon. M.
 1812 *P. Fremontiana* Endl. L.
 1813 *P. monogyllous* Torn & Flon.
 1813 *P. trichophyllum* Gou - will Rep.
P. striiformis L.
P. trichophyllum L.
P. edulis L.
P. ostrowskianum L.
 1818 *P. flavescens* Schlecht Linne
 1819 *P. Torreyana* Parry
~~1819~~ *P. depauperata* Torn - *P. moderna* 17
~~1819~~ *P. Capitellata* Torn - *P. moderna* 17
P. Edgeriana Harv.
P. Gordoniana Harv.
 1822 *P. flexilis* Juss - Long Engl. 2. p. 27 to
 1823 *P. glabra* Waller.
 1823 *P. austalis* Eng. Stolas now Brach.
~~1823~~ *P. glomerata* Eng.
 1823 *P. Erythrocephala* Parry
 1823 *P. Parryi* Eng. - S. J. Flon.
 1823 *P. rugosa* Parry.
 1824 *P. Pinacea* Gord.
 1825 *P. Parryana* Gord. - *P. parryana*.
 1827 *P. flavescens* Newb.
 1827 *P. williamsii* Newb.
 1828 *P. cembroides* Newb. (no Juss)



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Robert Brown on
Coniferae

Flinders Voyage London 1801
vol 2^o Appendix III p. 57 ~~24~~
translated in Nees vol I. 92-96

Cycadaceae in Flora Nov Holland
vol I p. 346 - 348

Nees edit III p. 202 - 204



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